

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A method for producing a ~~commercially appealing~~ gummy stem blight resistant *Cucumis melo* hybrid seed, said method comprising:  
crossing a recurrent *Cucumis melo* parent plant having commercially appealing attributes ~~first *Cucumis melo* plant~~ with a non-recurrent *Cucumis melo* parent plant having resistance to gummy stem blight ~~second *Cucumis melo* plant~~ to yield a first generation hybrid plant commercially appealing hybrid seed, wherein said ~~first plant is either a gummy stem blight resistant plant or a gummy stem blight non-resistant plant, and wherein said second plant is a gummy stem blight resistant plant, said gummy stem blight resistant plant being non-recurrent *Cucumis melo* parent plant~~ is selected from the group consisting of U.S.D.A. Plant Introduction ("PI") accession PI 157082, PI 511890, PI 482399, PI 482398, and PI 140471, and said ~~gummy stem blight non-resistant plant being recurrent *Cucumis melo* parent plant~~ is selected from the group consisting of Cornell ZPPM 339, TAM Uvalde, UC Topmark, Galia type, Ananas type, and Oro Rico, and said commercially appealing attributes are selected from the group consisting of enhanced seed yield, enhanced fruit size, enhanced fruit quality, enhanced fruit shelf life, enhanced seedling vigor, enhanced disease tolerance, enhanced insect tolerance, resistance to pesticides, resistance to herbicides, enhanced stems, enhanced roots, heat tolerance, drought tolerance, and enhanced maturity rate;  
backcrossing the recurrent parent plant with the first generation hybrid plant to yield a first backcross plant; and  
performing backcrosses of the recurrent parent plant with progeny of the first backcross plant under conditions effective to yield the gummy stem blight resistant *Cucumis melo* hybrid seed, wherein said hybrid seed produces a plant having the commercially appealing attributes of the recurrent parent plant and having enhanced resistance to gummy stem blight compared to the recurrent parent plant.

Claims 2-17 (cancelled)

18. (currently amended) A method for producing a ~~commercially appealing~~ gummy stem blight resistant *Cucumis melo* hybrid plant, said method comprising:  
growing a gummy stem blight resistant *Cucumis melo* first generation hybrid seed according to claim 1 to yield a ~~first generation commercially appealing~~ gummy stem blight resistant *Cucumis melo* hybrid plant.

19. (currently amended) A method for producing a ~~commercially appealing~~ gummy stem blight resistant *Cucumis melo* hybrid seed, said method comprising:  
providing a gummy stem blight resistant *Cucumis melo* hybrid plant produced according to the method of claim 18; and  
crossing the hybrid plant with a second gummy stem blight resistant *Cucumis melo* plant to yield ~~commercially appealing~~ gummy stem blight resistant *Cucumis melo* hybrid seeds.

20. (currently amended) The method according to claim 19, wherein said second gummy stem blight resistant *Cucumis melo* plant either comprises a gummy stem blight resistant *Cucumis melo* plant selected from the group consisting of PI 157082, PI 511890, PI 482399, PI 482398, and PI 140471, or is derived from said gummy stem blight resistant *Cucumis melo* plant using a breeding program comprising backcrossing the gummy stem blight resistant *Cucumis melo* plant with the recurrent parent plant for at least three generations coupled with traditional plant breeding techniques selected from the group consisting of pedigree breeding, selfing, and intercrossing, and backcrossing.

21. (currently amended) The method according to claim 20, wherein said breeding program comprises tissue culture techniques selected from the group consisting of micropropagation, meristem culture, somatic embryogenesis, somaclonal variation, *in vitro* selection, protoplast culture, somatic hybridization, and double-haploid breeding.

22. (currently amended) A ~~commercially appealing~~ gummy stem blight resistant *Cucumis melo* hybrid seed, prepared by a method comprising:  
crossing a recurrent *Cucumis melo* parent plant having commercially appealing attributes first *Cucumis melo* plant with a non-recurrent *Cucumis melo* parent plant having resistance to gummy stem blight second *Cucumis melo* plant to yield a first generation hybrid plant ~~commercially appealing hybrid seed~~, wherein said first plant is either a gummy stem blight resistant plant or a gummy stem blight non-resistant plant, and wherein said

~~second plant is a gummy stem blight resistant plant, said gummy stem blight resistant plant being non-recurrent *Cucumis melo* parent plant is selected from the group consisting of U.S.D.A. Plant Introduction ("PI") accession PI 157082, PI 511890, PI 482399, PI 482398, and PI 140471, and said gummy stem blight non-resistant plant being recurrent *Cucumis melo* parent plant is selected from the group consisting of Cornell ZPPM 339, TAM Uvalde, UC Topmark, Galia type, Ananas type, and Oro Rico, and said commercially appealing attributes are selected from the group consisting of enhanced seed yield, enhanced fruit size, enhanced fruit quality, enhanced fruit shelf life, enhanced seedling vigor, enhanced disease tolerance, enhanced insect tolerance, resistance to pesticides, resistance to herbicides, enhanced stems, enhanced roots, heat tolerance, drought tolerance, and enhanced maturity rate;~~

backcrossing the recurrent parent plant with the first generation hybrid plant to yield a first backcross plant; and

performing backcrosses of the recurrent parent plant with progeny of the first backcross plant under conditions effective to yield the gummy stem blight resistant *Cucumis melo* hybrid seed, wherein said hybrid seed produces a plant having the commercially appealing attributes of the recurrent parent plant and having enhanced resistance to gummy stem blight compared to the recurrent parent plant.

Claims 23-38 (cancelled)

39. (currently amended) A ~~commercially appealing~~ gummy stem blight resistant *Cucumis melo* hybrid plant, or its parts, produced by the seed of claim 22.

40. (original) Pollen of the hybrid plant according to claim 39.

41. (original) An ovule of the hybrid plant according to claim 39.

42. (previously presented) A tissue culture of regenerable cells of the hybrid plant according to claim 39, wherein multiple progeny plants having all the morphological and physiological characteristics of said hybrid plant are regenerated from said tissue culture of regenerable cells.

43. (original) A gummy stem blight resistant *Cucumis melo* progeny plant, or its parts, regenerated from the tissue culture of claim 42.

## Claim 44 (cancelled)

45. (currently amended) A ~~commercially appealing~~ gummy stem blight resistant *Cucumis melo* hybrid plant, prepared by a method comprising:

crossing a recurrent *Cucumis melo* parent plant having commercially appealing attributes ~~first *Cucumis melo* plant~~ with a non-recurrent *Cucumis melo* parent plant having resistance to gummy stem blight ~~second *Cucumis melo* plant~~ to yield a first generation hybrid plant commercially appealing hybrid seed, wherein said ~~first plant is either a gummy stem blight resistant plant or a gummy stem blight non-resistant plant, and wherein said second plant is a gummy stem blight resistant plant, said gummy stem blight resistant plant being non-recurrent *Cucumis melo* parent plant~~ is selected from the group consisting of U.S.D.A. Plant Introduction ("PI") accession PI 157082, PI 511890, PI 482399, PI 482398, and PI 140471, and said gummy stem blight non-resistant plant being recurrent *Cucumis melo* parent plant is selected from the group consisting of Cornell ZPPM 339, TAM Uvalde, UC Topmark, Galia type, Ananas type, and Oro Rico, and said commercially appealing attributes are selected from the group consisting of enhanced seed yield, enhanced fruit size, enhanced fruit quality, enhanced fruit shelf life, enhanced seedling vigor, enhanced disease tolerance, enhanced insect tolerance, resistance to pesticides, resistance to herbicides, enhanced stems, enhanced roots, heat tolerance, drought tolerance, and enhanced maturity rate;

backcrossing the recurrent parent plant with the first generation hybrid plant to yield a first backcross plant;

performing backcrosses of the recurrent parent plant with progeny of the first backcross plant under conditions effective to yield the gummy stem blight resistant *Cucumis melo* hybrid seed, wherein said hybrid seed produces a plant having the commercially appealing attributes of the recurrent parent plant and having enhanced resistance to gummy stem blight compared to the recurrent parent plant; and

growing the first-generation commercially appealing hybrid seed to yield a first-generation commercially appealing gummy stem blight resistant *Cucumis melo* hybrid plant.

## Claims 46-61 (cancelled)

62. (original) Pollen of the resistant hybrid plant according to claim 45.

63. (original) An ovule of the resistant hybrid plant according to claim 45.

64. (currently amended) A tissue culture of regenerable cells of the hybrid plant according to claim 45, wherein multiple progeny plants having all the morphological and physiological characteristics of said hybrid plant can be regenerated ~~are capable of regeneration~~ from said tissue culture of regenerable cells.

65. (original) A gummy stem blight resistant *Cucumis melo* progeny plant, or its parts, regenerated from the tissue culture of claim 64.

Claim 66 (cancelled)

67. (currently amended) Seed of a ~~commercially appealing~~ gummy stem blight resistant *Cucumis melo* breeding line designated NY 01-190-3R, -7L, -9L (composite), a sample of said seed having been deposited under ATCC accession number PTA-3860.

68. (previously presented) A commercially appealing *Cucumis melo* plant, or its parts, produced by the seed of claim 67.

69. (original) Pollen of the plant of claim 68.

70. (original) An ovule of the plant of claim 68.

71. (currently amended) A tissue culture of regenerable cells of the *Cucumis melo* breeding line according to claim 67, wherein multiple progeny plants having all the morphological and physiological characteristics of said hybrid *Cucumis melo* breeding line can be regenerated ~~are capable of regeneration~~ from said tissue culture of regenerable cells.

72. (original) A tissue culture according to claim 71, wherein the tissue is selected from the group consisting of leaves, pollen, embryos, roots, stems, root tips, anthers, flowers, seeds, and fruit.

73. (currently amended) A ~~commercially appealing~~ *Cucumis melo* plant, or its parts, regenerated from the tissue culture of claim 71 and having all the morphological and physiological characteristics of said *Cucumis melo* breeding line.